Mick Sagrillo — Wizard of Wind

By Vern Modeland

entle breeze or gale force, wind is the fundamental output of the world's weather machine. People were harnessing the wind to work for them in the 1100s. Wind power became the energy source that brought electricity to many a farm before Rural Electrification Administration (REA) trucks came down the back roads.

The wind also seems to have pushed Mick Sagrillo on a course he really hadn't started planning yet when he was growing up in the 60s in Chicago, becoming someone who loves to teach and who, even more, loves to tinker.

Sagrillo today is in demand as one of two people singled out as leaders in the area of hands-on expertise when it comes to wind-powered electrical energy systems and their components. Sagrillo is the founder and owner of Lake Michigan Wind and Sun, a company that builds, re-builds and repairs wind generators and components. It has customers in 43 states and 18 countries.

"They're the kind of people I like to work with—people who are willing to get their hands dirty," he says of his clients.

Windpower resource

Sagrillo has collected what he describes as the largest patent library in the world specifically related to wind-powered electrical generation. He also has accumulated information, and the resources, to keep those old pre-REA Jacobs systems and Winco/Wincharger devices whirling and charging. His company sells newer technology too: wind generators and systems, towers, electronic controls and inverters, and airfoils. It stocks replacement parts, or will make

them, for numerous brands of wind systems. Lake Michigan Wind and Sun also consults, answering questions about location, system sizing, towers, interfacing with utilities, and other details that come up when looking into wind-generated electrical power systems.

"We don't do installations or on-site repairs," says Sagrillo. "We work here."

Here is a five-acre self-reliant homestead at the base of the Door Peninsula, that part of Wisconsin that peels away into Lake Michigan to shelter Green Bay. It's about 30 miles southwest from Sagrillo's home to the city of Green Bay.

Fleeing the city life

Mick and Lynn Sagrillo were early into the self-reliance movement. They first decided on getting away from the big city back in 1972, seeking a better environment in which to raise their new daughter, Jenny.

On Mick's teacher's salary of about \$8000 a year, they managed to save almost \$2500, keeping their needs simple, eating and preserving a lot of home-grown food, and utilizing Mick's inherited handyman abilities.

He found a job in the suburban Fox River area, teaching environmental studies, biology, and earth sciences for grades Kindergarten through 12 at Woodstock, Illinois. He also managed to talk his way into developing an environmental studies program for the entire school district.

"I was intensely interested, and anybody can become an expert," he says. With him, that's basic philosophy.

Lynn returned to school and got an advanced degree so that she, too, could teach. And in 1978, Lynn Sagrillo found a teaching position at

the University of Wisconsin at Green Bay.

Mick decided the time had come for him to become a house-spouse.

Finding a fixer-upper

Finding the right house in which to spouse took a while, he recalls. Eventually, he was able to convince one real estate agent that he meant what he said about wanting "an old farmhouse, in the middle of nowhere, one with no plumbing and no electricity."

The real estate agent called one day to describe a place that had been built in 1871 and added on to in the early 1900s. It had a scattering of out-buildings on five acres that included a very old log cabin and a three-hole out-house. There were two electrical outlets in the house, three overhead lights, and an electric water heater.

The place was a consummate fixer-upper, perfect for the handyman in Mick. The Sagrillos drove up to look at it on a Saturday and made an offer on Sunday.

That first winter, they lived with cold winter winds whistling through exposed clapboards. But today, it's become a much-remodeled, super-insulated, passive solar, comfortable home for Mick, Lynn, and Jenny.

That is, when they all can be at home. Lynn is now a busy college lecturer who also is finishing up work on a Ph.D. at the University of Wisconsin, 165 miles away at Madison. Their daughter is in her fifth year of college studies, following her parents into teaching as a profession.

Sagrillo's first fix-up priority was to put in a septic system and some plumbing to replace the bucket he found was the end of the line for waste water beneath the kitchen sink.

He hopes for a greenhouse. He knows about greenhouses. His first one was built on a third floor porch of the apartment house in which they lived in Chicago in the early 70s.

One outbuilding, a 65-by-30-foot, brick-walled machine shed and granary, was remodeled to become a wind-powered shop and office for Lake Michigan Wind & Sun and his other interests.

Preserving the look

Preserving the exterior appearance of the old Wisconsin farm house as much as he could, Sagrillo gutted the structure. A new floor plan left just two rooms downstairs.

"There's a bathroom and everything else. If you want to have radiant heating, you have to have an open floor plan."

A wall of south-facing glass brings in the sun's warmth in winter. Lots of glass allows ready viewing of gathering storms.

"That's sort of humbling," Sagrillo says.

Today, the house has expanded to afford 3,000 square feet of living space.

"Cedar beams, oak floors, and lots of brick. The cabinets are walnut and oak and butternut. It's all locally-cut wood.

"I heat with wood, and we raise all our own pork and beef [and chickens and fruit and garden produce—selling enough to pay for what they keep]. It was a sustainable homestead until about two years ago."

Two years ago was about when the wind power business and his other work in renewable energy began absorbing a major portion of Sagrillo's time. The Public Service Commission of Wisconsin had picked him to serve on a Wisconsin Demand-Side Management Panel to oversee expenditure of up to \$100 million on electrical utility consumer

demonstration projects. He had become a founder and director of RENEW Wisconsin, a coalition of business, government and university professionals whose aim is to develop and foster the use of renewable energy in that state. He was called on as an expert witness in the area of wind power for the Wisconsin PSC at planning meetings. And there was his involvement with the Union of Concerned Scientists' Initiative on Renewable Energy. It is a group examining the potential for using readily renewable sources such as wind, solar, and water, to generate electricity in the Midwest.

Father of fair

Sagrillo also helped start the Renewable Midwest Energy Association and he is one of the founders of the Midwest Renewable Energy Fair held each June at Amhurst, Wisconsin. In four years, that event has grown to attract enthusiastic crowds, exhibitors, and media attention from all over the country. More than 6,500 people braved nasty weather to attend in 1993, to mingle and listen to folks who are living with renewable energy or someday hoping to.

The cost of harnessing the wind to generate electricity is competitive in 1993 dollars, according to the U.S. Department of Energy, particularly in the northeast and western parts of the U.S. A utility industry report claims that non-polluting wind generators could today be cranking out 10 percent or more of the electrical power being consumed within 40 of the 51 states. And the Great Plains states have the potential to export wind-generated electrical energy. A commitment by the power utilities to wind-generation there could turn out up to 10 times the demand in those states!

All this potential leads to why Mick Sagrillo is getting to be much busier than he'd like to be. He teaches an intensive week-long Wind Workshop for Jordan College at Grand Rapids, Michigan. And he heads off annually to Carbondale, Colorado, to teach at the Solar Energy Institute.

In between, he writes articles on wind power for various magazines, including Backwoods Home (Nov/Dec 1993). His activity hasn't gone unnoticed or unrewarded. Sagrillo won the 1992 Renewable Energy Pioneer award from PV Network News / Solar Electricity Today magazine. This year, he received the Environmental Achievement Award from the Wisconsin Greens, an environmental preservation group. And Wisconsin Secretary of State, Douglas La Follett, has nominated him for the prestigious John Ericsson Award given out by the U.S. Department of Energy.

His heroes

Who does such a man look up to? "Two of the very dear heroes in my life are my mother's father and my father's mother," says Sagrillo. His grandparents came from Yugoslavia and Italy to settle on a few acres in central Indiana where they raised their families and their food in a self-reliant old-world fashion that made a lasting impression on Mick Sagrillo.

"And there was my father. He's another of my heros. He was a putterer, a jack of all trades.

"I guess what I learned from them is that you can do, and you can be, anything that you set your mind to."

Mick Sagrillo is trying to pass on the real importance in that. $\boldsymbol{\Delta}$